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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,758	03/26/2004	Benjamin N. Eldridge	P127C1-US	9082

50905 7590 08/31/2005

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EXAMINER	
BAYAT, BRADLEY B	
ART UNIT	**PAPER NUMBER**
3621	

DATE MAILED: 08/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/810,758	ELDRIDGE ET AL.	
	Examiner	Art Unit	
	Bradley B. Bayat	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-53* is/are pending in the application.

4a) Of the above claim(s) *36-53* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *November 17, 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26, 2005 has been entered.

Status of Claims

As per applicant's above noted request for continued examination, claims 25-35 were amended and claim 36-53 were added in the response filed on May 26, 2005. Thus, claims 25-53 are presented for examination on the merits.

Election/Restrictions

Newly submitted claims 36-53 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Inventions I-II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions I has separate utility such as providing a method of making/designing a probe card (claims 25-35), classified in 700/97. Invention II (new claims 36-53), however, is directed to testing/evaluating and design verification of semiconductor devices/circuit designs, classified in 716/4-5. See MPEP 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

on the merits. Accordingly, claims 36-53 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Applicant is respectfully requested to cancel the non-elected claims in response to this office action.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on November 17, 2004 is in compliance with the provisions of 37 CFR 1.97 and therefore considered by the examiner.

Response to Arguments

Applicant's arguments with respect to claims 25-35 have been considered but are moot in view of the new ground(s) of rejection. The examiner has reviewed applicant's arguments with regards to the claimed subject matter and they are duly addressed in the rejection that follows.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25, 28-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the

"progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a method claim to pass muster, the recited method must somehow apply, involve, use, or advance the technological arts.

The recited steps of merely receiving information, generating a response based on that information and communicating such response do not apply, involve, use, or advance the technological arts since a user can perform all of the recited steps manually. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Also, a mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

By way of example, the examiner expressly describes the non-statutory nature of claim 25, wherein the steps of can be accomplished as follows: i) sender emails or via VOIP transfers information to receiver (trivial use of computer); ii) receiver manually devises a proposal based on the information; and iii) receiver communicates via email or VOIP re acceptability of proposal from sender. For example, the applicant can specify whether certain steps are performed automatically, i.e., automatically generating a proposed design based on said information.

There is always some form of physical transformation within a computer because a computer acts on signals and transforms them during its operation and changes the state of its

components during the execution of a process. Even though such a physical transformation occurs within a computer, such activity is not determinative of whether the process is statutory because such transformation alone does not distinguish a statutory computer process from a nonstatutory computer process. What is determinative is not how the computer performs the process, but what the computer does to achieve a practical application. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Examples of claimed processes that do not achieve a practical application include:

> - step of "updating alarm limits" found to constitute changing the number value of a variable to represent the result of the calculation (*Parker v. Flook*, 437 U.S. 584, 585, 198 USPQ 193, 195 (1978));
>
> - final step of "equating" the process outputs to the values of the last set of process inputs found to constitute storing the result of calculations (*In re Gelnovatch*, 595 F.2d 32, 41 n.7, 201 USPQ 136, 145 n.7 (CCPA 1979); and
>
> - step of "transmitting electrical signals representing" the result of calculations (*In re De Castelet*, 562 F.2d 1236, 1244, 195 USPQ 439, 446 (CCPA 1977) ("That the computer is instructed to transmit electrical signals, representing the results of its calculations, does not constitute the type of 'post solution activity' found in *Flook*, [437 U.S. 584, 198 USPQ 193 (1978)], and does not transform the claim into one for a process merely using an algorithm. The final transmitting step constitutes nothing more than reading out the result of the calculations.")); and
>
> -step of displaying a calculation as a gray code scale (*In re Abele,* 684 F.2d 902, 908, 214 USPQ 682, 687 (CCPA 1982)).

Although the recited method steps appear to produce a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, the above referenced claims are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 25-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zizzo, US 6,578,174 B2, in view of Cooke et al. (hereinafter Cooke), US 6,701,474 B2.

As per claim 25, Zizzo discloses a multi-faceted circuit and chip design system and method facilitating electronic design by provision of useful goods, services, information and other resources by a plurality of end users and suppliers connected over a distributed electronic network such as the Internet to a design platform (column 5, line 59-column 6, line 10). Zizzo further discloses verification tools to insure proper integration and connectivity of the overall SoC design (column 8, lines 15-39). A user enters design criteria and parameters and transmits it through a user GUI. For instance, the IP core blocks encompassing a design may include virtual micro cores, FPGAs, DSPs, complex-processing cores, and any other components a design engineer may find useful (column 9, lines 30-61).

Although Zizzo describes a comprehensive design process that encompasses every aspect of chip design and verification, he does not explicitly describe a user inputting parameters describing a wafer to be tested, wherein a proposed probe card for testing said wafer is communicated to a user.

Cooke, however, teaches that probe cards are customized for the particular IC design represented by the DUT. As a customized component, probe cards are either designed in parallel

with or after the IC design process. Cooke further teaches that the footprint or specification of the wafer generally comprise a tester interface between the probe card and the DUT implemented as a programmable device to perform verification tests on the derived designs (column 14, line 46-column 15, line 28).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to include a wafer/probe card design process as part of the comprehensive design and verification platform taught by Zizzo, in order to allow efficient design without a large initial capital outlay and to further streamline and automate the whole design and fabrication process (Zizzo: columns 3-4; Cooke: column 2-4).

As per the following claims Zizzo discloses:

Claim 26: As per method Claim 25 described above, further comprising providing a graphical interface for use by said prospective customer to enable input of said information to be tested (fig 8a-d; figure 1 design platform 104).

Claim 27: As per method Claim 26 described above, wherein said graphical interface comprises at least one Web page (fig 8a-d).

Claim 28: As per method Claim 25 described above, further comprising accepting an order from said prospective customer to manufacture said design (figure 4 and associated text).

Claim 29: As per method Claim 25 described above, further comprising verifying said proposed design (figures 5 and associated text, verification phase).

Claim 30: As per method Claim 25 described above, wherein said verification package further comprises drawings of said proposed design (figure 4 and associated text; proposal/contract).

Claim 31: As per method Claim 25 described above, wherein said communicating step further comprises notifying said prospective customer of proposed modifications to said proposed design (fig 9 and associated text; modifications and edits)

Claim 32: As per method Claim 29 described above, wherein said verifying step further comprises simulating operation of said proposed design (fig 5, 506 simulation).

Claim 33: As per method Claim 29 described above, wherein said verifying step further comprises performing an automated simulation of said proposed design (fig 5, steps 504-510).

Claim 34: As per method Claim 29 described above, wherein said verifying step further comprises performing a simulation based on particular specifications designated by said prospective customer (fig 5 and associated text).

Claim 35: As per method Claim 25 described above further comprising fabricating a said proposed design (columns 16, lines 1-19).

Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. The examiner's previous action is incorporated by reference.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 25-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-54 of U.S. Patent No. 6,714,828 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the claimed subject matter without employing a server coupled to a network and automatically performing the generating step, as had been done manually in the past by design engineers.

Conclusion

The prior art made of record and not relied upon is considered **pertinent** to applicant's disclosure and it is recommended for review:

- US Patent 6,594,799 B1 to Robertson et al.
- US Patent 6,851,094 B1 to Robertson et al.
- US Patent 6,113,646 to Holden.
- US 6,748,287 B1 to Hagen et al.
- USPAP 2004/0210413 A1 to Dorough et al.
- Keutzer et al., System-Level Design: Orthogonalization of Concerns and Platform-Based Design, December 2000, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. 19, No. 12, pp. 1523-1543.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley B. Bayat whose telephone number is 571-272-6704. The examiner can normally be reached on Tuesday - Friday 8 a.m.-6:30 p.m. and by email: bradley.bayat@uspto.gov. If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, James Trammell can be reached on 571-272-6712.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(571) 273-8300 - Official communications; including After Final responses.

(571) 273-6704 - Informal/Draft communications to the examiner.

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